

UCP 2023 MINUTES OF MEETING OF RESILIENT SOCIETIES MARKET SEGMENT PANEL

Meeting Date	07.11.2023	Time	10:00 - 17:00 CET
Meeting Called By	European (EU) Space Week 2023 User Consultation platform (UCP) 2023 Resilient Societies	Location	Seville (hybrid event)
Minutes Taken By	Antonella DI FAZIO (FDC) Xabier MENDAZA (FDC)	Next Meeting Date	N/A
Attendees	<p>Philipp Scheidemann, EUSPA, Session moderator Antonella Di Fazio, FDC, Writer of MoM Xabier Mandaza, FDC, Writer of MoM and Zoom keeper</p> <p>User Community Representatives (UCRs) Piotr Sitek, EUSPA Michael Doherty, PEN-CP Jean-Philippe Mechin, CEREMA Marco Mattiocco, Customs and Monopolies Agency ADM/Italy Michael Doherty, PEN-CP Axel Kerep, PARCS Ettore Motti, UXORISK Cammilla La Gioia, UXORISK Marcos López Cabeceira, GMV Giacomo Nizzi, Eagleprojects Spa</p> <p>Complete list of attendees is in Annex 1: List of Attendees.</p>		
Distribution (in addition to attendees)	UCP Plenary, EUSPA, Public		

Agenda Items	Presenter
1. Opening and Introduction of the User Consultation Platform & Welcome to “Resilient Societies” Session EU Space Programme Components current state and future services for users	Philipp Scheidemann, EUSPA Piotr Sitek, EUSPA
2. Customs Operations: Digital transformation of Customs	Michael Doherty, PEN-CP
3. Dangerous Goods Operations: Electronic Freight Transport Information (eFTI)	Jean-Philippe Mechin, CEREMA
4. Customs Operations: National and international fast corridors	Marco Mattiocco, Customs and Monopolies Agency ADM/Italy
5. Preventing trafficking and smuggling: Risk assessment in supply chain and trade	Michael Doherty, PEN-CP
6. Preventing trafficking and smuggling: Safeguard of cultural heritage	Axel Kerep, PARCS

7. Robots and automated platforms: UneXploded Ordnance risk assessment and clearance	Ettore Motti and Cammilla La Gioia, UXORISK
8. ASGARD: Experience in resilient navigation	Marcos López Cabeceira, GMV
9. Robots and automated platforms – Dog-robot for UXO disposal	Giacomo Nizzi, Eagleprojects Spa
10. User Requirements Discussion and Validation	Antonella Di Fazio, FDC
11. Use of Satellite Communications (SatCom)	Xabier Mandaza, FDC

1 MINUTES OF MEETING

The presentations were made following the agenda. The agenda and the presentation are annexed to this document.

Introductory part

After the opening and welcome words, the introductory part was run by Philipp Scheidemann (EUSPA) including the explanations about the UCP and the session, and a speech providing the main information about the EU Space Programme Components current state and future services for users. Mr. Scheidemann also encouraged everyone in the room to participate actively during the session.

It was underlined that the “Resilient Societies” market segment includes a wide variety of heterogeneous applications. For the first time, this market segment was considered in the UCP, the focus being on six applications from three market subsegments, namely Customs Operations, Prevention and suppression of trafficking and smuggling, Robots and automated platforms.

The objective of the session was:

1. To present and discuss the preliminary results of the previous remote consultation among selected stakeholders conducted in order to gather feedbacks and inputs, in relation to:
 - The identification and analysis of the space-enabled applications
 - The definition of user requirements for satellite technologies outlined in a draft report named “Report on User Requirements (RUR)”, acting as a reference to the EU Space Programme and for the Resilient Societies community.

The selected stakeholders belong to the user community, mainly Customs Authorities, Law Enforcement Agencies (LEAs) and relevant international organisations and bodies (such as WCO and UNODC).
2. To gather initial feedbacks from the discussion during the “Resilient Societies” session, that are included in this document and will be used to produce an updated version of the RUR;
3. To launch the next steps, consisting in making the presentations, this document and the RUR publicly available for another remote consultation, to collect further feedbacks and inputs in order to finalise the RUR. Nevertheless, it is emphasised that the RUR is conceived to be a living and evolving document periodically updated by EUSPA with the most up-to-date users’ needs and requirements, likely in the frame of the next UCP.

Piotr Sitek (EUSPA) proceeded to present the Space Components of the EUSPA Space Programme: Galileo services, EGNOS, Copernicus and GovSatCom. In relation to the last component, EUSPA is embarked in procuring the GovSatCom Hub, with Initial services in 2024. A new component is also SSA,

aiming at protecting against space incidents. After the components are presented, the overall EUSPA activities are also presented (engineering, exploitation, security, etc.).

A specific question from the audience specifically on the resiliency of the EU space systems and the networks they rely on, gave the opportunity to the EUSPA to promote the ISAC initiative, a network-based information sharing platform formed to promote collaboration, awareness and best practices among private entities (<https://www.euspa.europa.eu/opportunities/isac>). Another question addressed the relationship between EUSPA and ESA, which was answered explaining the substantial synergy and coordination between the two Agencies.

Six applications, relevant use cases, users' needs and satellite technologies utilisation

The six identified applications are presented, in terms of use cases, needs and utilisation of satellite technologies. It is underlined that in the initial remote consultation only use cases for GNSS and Earth Observation (EO) were found. Nevertheless, it was revealed that in order to explore possible needs/utilisations for of other EU provided space services such as satellite connectivity, a specific targeted awareness should be done and this UCP's session gave the opportunity for providing key information about Satellite communication.

The main outcomes of the discussion run at the end of each presentation are reported here below.

Customs Operations: Digital transformation of Customs

The main outcome of the discussion is that though this application can benefit from a wider adoption of satellite technologies, primarily GNSS, especially in terms of higher safety and security, there are only isolated and fragmented best practices/pilot projects currently in use. The main reason is that the user community is not familiar with the potential of GNSS, and an awareness campaign targeting the added value of GNSS with respect to/in combination with other technologies should be initiated (for example by technology providers, similarity to what done for the scanning technology).

Concerning the use of satellite communication, off-the-shelf tracking and tracing solutions/products are already available on the market, offered by technology providers and/or satellite connectivity service providers. These solutions/products consist of devices generally integrating sensors installed on the goods (e.g., container, swap body), that transmit positions and information from the sensors also via satellite communication, sometimes also in combination with terrestrial communication (the transmission via satellite communication is activated in environments lacking of a suitable the terrestrial network coverage).

Dangerous Goods Operations: Electronic Freight Transport Information (eFTI)

It is remarked that the implementation of the eFTI Regulation offers an important environment for the introduction and adoption of GNSS in the logistics sector, especially at EU level. Though not specifically required in the basic data set of the eFTI, the GNSS position can allow added value functions especially for LEAs, control authorities and regulators, such as that presented during the session.

The requirements on GNSS/position are derived considering one the most stringent use cases, related to the control of traffic and access of vehicles transporting goods in sensitive areas and limited zones (such as cities having low emission zones, characterised by very near lanes, and the control has to be applied at lane level). The eFTI information on the transported freights combined with a precise and trusted position enables effective and smart enforcement operations.

Moreover, considering that the eFTI architecture is based on data sharing and access among the various entities (such as eFTI gates, eFTI platforms, systems of the economic operators), according to the consulted users, an authenticated position and timing can play a key role to support the reliability

and trust on the exchanged data. In this respect, the characteristics of Galileo Authentication (OSNMA Open Service Navigation Message Authentication) are of interest.

A long path was undertaken started in 2007, with a puzzle of various initiatives addressing the various necessary aspects, e.g., architecture, standardisation, technology development, validation.

It is reminded that one of the main achievements is the inclusion of OSNMA in the DATEXII, that is the information model for road traffic and travel information in Europe, specifying the data standard for exchanging traffic information between traffic management centres, traffic service providers, traffic operators and media partners (<https://datex2.eu>).

The importance of the standardisation is remarked by emphasising that in Customs Operations for the time being there is an absence of specific standards for technology performances, which can possibly drive a wider introduction and adoption of technologies such as EGNSS.

The conclusion was that navigation (for positioning and timing capabilities) is the main EU provided space service of interest for eFTI, nevertheless also the opportunities linked to satellite communication should be explored.

Customs Operations: National and international fast corridors

Already today GNSS is used in national fast corridors, while only rail international fast corridors are implemented.

Considering the Customs' related regulatory framework, Galileo Authentication could enable those international fast corridors today not yet implemented, enabling the Customs' Authorities to monitoring the movement from the port/border entry point to the Customs declaration place and trust that no threat/additional risk has been introduced.

The main requirements from the fast corridors use cases are related to the integrity of the position data, and the possibility to rely and trust on them (being the fast corridors operation under the full responsibility of the specific Customs Authority). In addition to fast corridors, there are potential use cases in conjunction with the EU Transit System, whereby consignments may be moved across a number of Member States, without the need for inspection.

Another important aspect revealed from this use case is that the position in very diverse operating environments and transport means (e.g., port, terminals, rail/wagons, road/truck, sea/vessels, containers, swap bodies, trailers) is generally obtained through the combination/integration of GNSS with other sensors/technologies/techniques.

However it was highlighted that the cost of the equipment/devices is a fundamental driving factor for the economic operators that could inhibit a wider introduction/adoption. Additionally also the costs for the equipment/devices/informative systems and for the connection (in fast corridors online tracking is needed) have to be considered.

Preventing trafficking and smuggling: Risk assessment in supply chain and trade

This use case strongly relies on the secure sharing of data among the involved LEAs, organisations and bodies (such as WCO, UNODC) in order to run risk assessment procedures aimed at combating illicit trafficking and counterfeiting.

Also in this use case the integrity and the reliability of data play a key role, especially in the case of sensitive and special goods. The examples of two EU initiatives, CISE and CONNECTORS (started on October 2023), in which LEAs share best practices on the use of technologies (including Satcom) are presented.

A question from the audience pointed out that the main obstacle is the lack of a wider adoption of technology, and the need to convince the economic operators who are not willing to be remotely controlled and cannot be obliged. For example, the tools adopted so far is to set-up dedicated/facilitated Customs clearing procedures to those economic operators adopting tracking and tracing solutions, providing direct advantaged also because of the ability to remotely monitor the

shipment of the goods. Moreover, the establishment of specific standards for performances, as mentioned already for the use case on eFTI, could help.

Preventing trafficking and smuggling: Safeguard of cultural heritage

Space archaeology has been developing rapidly over the last decade, also in the field of remote monitoring of the looting of archaeological sites when archaeologists are unable to go to the conflict zones. In the specific use case presented by the European consortium ANCHISE, many different technologies are used (such as EO images, drones, artificial intelligence, web analysis), and depending on the specific cases (mass looting, looting by metal detectorists), different needs and requirements can be outlined. Looting in Europe is more discrete and less visible, a better scale and definition should be used to detect these looting pits.

However, the main message conveyed by the user involved is that EO is a very powerful tool in relation to archaeological material and cultural heritage, not only for LEAs working to protect it, but unfortunately also for looters, as most of this data is accessible through OSINT ((Open Source Intelligence). If EO data are commonly used by looters, the presented programme aims to provide LEAs with a more powerful set of tools, in particular Arte-Fact ©, which should favour and facilitate their use of EO data to support them in their fight against looting and to win the technology race against the looters.

In addition to the need mentioned at the end of the presentation, the discussion also highlighted the need for standardised, less fragmented space archaeology programmes, an EO database for archaeological sites, and interfaces for LEAs to use EO imagery from different sources in an easy and friendly way.

Finally, the use case presented a coherent set of tools, all related from space observation to the detection of illicit cultural objects by customs at borders or on the Internet, to address the issue of provenance of illegal objects and their link to looted archaeological sites.

Robots and automated platforms: UneXploded (UXO) Ordnance risk assessment and clearance

Also this use case relies on the use of different technologies. Considering the type of operations, the need to cope with stringent requirements and to conduct them with high safety, advanced and state-of-the-art solutions are already adopted in operation, including GNSS receivers, magnetometers, cameras, drones, data elaboration and RTK (Real-Time Kinematics) techniques.

To a question raised by the audience on the reason for certain products/solutions (in particular for the drone produced by a Chinese firm), it was clarified that various criteria drive the selection of the products/solutions, such as commercial motivations (e.g., market availability, performance and quality) and familiarity of the personnel. For the GNSS receiver, a SXblue Platinum receiver is chosen, being a high grade product developed and manufactured in Canada.

Industry proposed possible answers to the users' needs

The second part of the session was devoted to present some industry products/solutions possibly answering to the need presented in the six applications and relevant use cases.

The ASGARD GNSS receiver OSNMA ready was presented showing the availability of technology able to cope with the need of trust on all the application data presented. Authenticated position and timing information (to favour resiliency, security and safety), as resulting from the use cases related to eFTI, fast corridors and risk assessment in supply chain and trade.

Upon a question from the audience on how OSNMA works, an explanation was given on the fact that the use of OSNMA only requires a specific GNSS receiver similarly to what is done already with no-OSNMA ready GNSS receivers, updated with a parallel internal process to take advantage of Galileo Authentication/OSNMA to provide trust of provided data solutions. However, this showed that a tailored awareness on Galileo Authentication/OSNMA has to be conducted towards the users' community.

Upon a question from the audience on the use of OSNMA in smartphones, it was also clarified that OSNMA is for the time being more oriented to specific professional applications (such as emergency situations, patrol and military assets, civil critical infrastructures), especially those regulated, where there is a need of trust on the final output data solution as derived from responsibility and obligation aspects. Other example discussed during the session is in the implementation of OSNMA in Digital Tachographs. Nevertheless, there should be no issues for smartphones (knowing there is a need for extra power in the internal GNSS receiver), with the only potential issue would be the time to acquire the authentication.

The GISBO solution applied to dog-robot technology for UXO finding was showcased. It was underlined that this solution relies on the integration of different technologies, the dog-robot is able to move autonomously in difficult areas that's to the use of GNSS combined with LIDARs, either autonomously or remotely driven/operated. This opened the floor to a question from the audience regarding how the navigation is managed: as of today, the signal is relayed to be operated remotely, as the technology is yet quite new.

It is revealed that the use of dog-robot is very flexible and adaptable to different use cases (e.g., monitoring of oil & gas pipelines and water resources, delivery in isolated zones, operations in sensitive areas and with risky material for humans such as CBRN - Chemical, Biological, Radiological, Nuclear) and various environments. Other sensors can be integrated depending on the specific applications/use cases. 20 kg is the maximum weight of the payload that a dog-robot can embark.

The dog-robot's power autonomy is about one hour and half/two hours, depending on the number of sensors and operations. The dog-robot is rechargeable through a plug (in about two hours for a full recharging cycle). It recognises when the power autonomy is low and it is able to autonomously search for the plug and connect to it for the recharging.

The information can also be sent in real-time generally via 5G communication, if needed in the case of rural areas not covered by terrestrial communications through dedicated communication networks. In the frame of a research & development path, the possibility of utilising satellite connectivity could be explored.

Thus, the discussion on the industry's possible answers to the users' needs gave the opportunity to:

- As mentioned above, provide synthetic explanations on how OSNMA works, provides as added value and impacts at user level. Follow-up bilateral contacts will be established, however, the key outcome is that:
 - There is a need of a customised awareness on Galileo Authentication/OSNMA, for example towards EU initiatives that establish networks of Customs administrations sharing knowledge best practices (such as PEN-CP (www.pen-cp.net) mentioned in the presentation on Preventing trafficking and smuggling: Risk assessment in supply chain and trade).
 - Moreover, the user requirement of high trust need on output data of implemented or future solutions, clearly identifies a roadmap advantaging of the existing SiS (Signal in Space) of OSNMA into several applications illustrated in the session.

- As mentioned above, to preliminarily introduce the possible exploitation of Satcom, thanks to the capabilities of the satellite connectivity to complement the terrestrial networks in the case of difficult environments (such as rural areas and in non-terrestrial zones such as maritime use cases) and to cope with stringent requirements of security and high number of connections acting as back-up of the terrestrial networks.
- Promote the use of Radio Frequency (RF) signals (SIGINT SIGnals INTelligence) acquired by satellites (dedicated satellites constellation) for detecting and geolocating vessels worldwide. Therefore, this satellite based technology is suitable for applications aimed at the prevention of/fight against trafficking and smuggling for LEAs such as navies and coast guards, enabling them to detect RF emissions generated also by non-cooperative vessels, particularly those that have voluntarily switched off their AIS (Automatic Identification System) because they are likely involved in illegal or undeclared activities at sea. This type of RF data is already utilised in combination with other maritime surveillance data for example in law enforcement operations in IUU (Illegal, Unreported and Unregulated) fishing use case and by some Custom Authorities for law enforcement activities.

User Requirements Discussion and Validation

The work on the user requirements was presented, in terms of methodology, inputs, main outcomes and next steps. It was explained that the use cases/users' needs/utilisations (present, in plan/future, expected usage) were considered to derive the user requirements in the form of tables, that are shown and discussed during the session.

- It was underlined that the remote consultation conducted before the UCP was just the first iteration aimed to produce a draft RUR, which will be updated based on the outcomes of the UCP session and made publicly available for a second remote consultation/iteration in order to gather further inputs/feedbacks and produce the finalised version. Again it was remarked that the RUR is a living and evolving document, that will serve as basis for a possible next UCP exercise.
- Furthermore, it was explained that in this first UCP considering the market segment labelled as "Resilient societies"/related subsegments and applications, the attention of the involved users was focused on GNSS and EO as a starting point, being the satellite technologies more familiar for them. Nevertheless, as seen in the different discussions, there is also a high potential for Satcom to be explored, however there is the need for a tailored awareness and this session gave the opportunity with a complementary presentation at the end of the slot. The aim of the presentation on Satcom was to present the scope of the EU initiatives in terms of Governmental applications (such as GovSatCom and IRIS2) together with examples in user applications and how they can benefit from these services.

Some comments arose from the discussion were on the indicators (of the tables) reporting the user requirements:

- Concerning the Accuracy required in the Customs Operations: National and international fast corridors, it is suggested to indicate also whether the value provided by the users takes into account also the accuracy of the digital map where the position of the asset is displayed or investigate if there is an impact.
- In general, it is suggested to add the Time To Alert (TTA) defined as the lapse of time starting when a particular dangerous or not desired incident occurs to the time that the alert is arisen. It is identified as a trust metric useful to evaluate the possible utilisation of OSNMA meeting user needs.
- In general, the Robustness requires a more detail explanation, it also depends on the specific solution/service. "High" can be understood in different ways, depending on the context, hence it

would be worth to ask more details, in order to define it as unambiguously as possible, such as in terms of quantification if possible, or in terms of distinction among robustness and integrity. For example, in the case of the use case dealing with UXO Ordnance risk assessment and clearance, when information is sent real-time, the robustness could refer also to requirements related to the communication means.

Use of Satellite Communications (Satcom)

The presentation followed-up the basic awareness about the EU Secure Connectivity Programme and EU Secure Satellite Constellation initiated in the introductory part.

Moreover, continuing the discussion started during the presentation of GISBO solution applied to dog-robot technology for UXO finding, launched the survey on possible use cases in the Resilient Societies and related market subsegments (namely Customs Operations, Prevention and suppression of trafficking and smuggling, Robots and automated platforms consultation) considered in UCP 2023:

- The role of the satellite communication to complement the terrestrial networks acting as gap filler in the case of unavailability (for example in difficult environments) or enhancing performances in the case of stringent requirements for security and high number of connections;
- Ideas on possible use cases in the Resilient Societies and related market subsegments;
- The key indicators allowing to characterise the requirements for the satellite communication services.

The perspectives and next steps in the frame of UCP were detailed, i.e., a summary part on satellite communication will be included in the next version of the RUR that will be circulated for the second remote consultation/iteration.

During the discussion, it was mentioned by the audience that a use case concerning IoT (Internet of Thing) can be of interest for Customs Operations. Tracking & tracing products/solutions making use of satellite communication are already commercially available and adopted in operations by some economic operators. The need of a secure connection for example in the case of special goods (e.g., radioactive material, special waste, sensitive and dual-use goods such as weapons) should be explored and is considered mandatory to guarantee anti-tampering during the transmission of a trusted position (e.g., processed with OSNMA). Use cases can comprise cooperative fleet management, e.g., of dangerous goods, or uncooperative tracing e.g., offender tracking.

Wrap-up, conclusions and next steps

The last part of the session was devoted to outline conclusive remarks and collect further feedbacks. In conclusion it was recognised that the Resilient Societies and the considered market subsegments are very promising to benefit from the satellite technology and particularly for the EU Space Programme.

- This first UCP exercise revealed a very interested community with needs on GNSS and EO, and that there is a lot of potential for further iteration(s), addressing also Satcom.
- There is a common expectation for satellite technologies' ability to improve current operations, or to enable new operations today not possible, or to stimulate ideas for future implementations, and this applies to GNSS, EO and Satcom.
- GNSS and EO are generally used integrated/in combination with other sensors, technologies and techniques.
- Specifically on Satcom there is a clear request of awareness, allowing to stimulate needs.

During the final discussion, Frontex intervened remotely, confirming what was concluded and remarking the importance of secure Satcom to complete the picture together with GNSS and EO. The relevance also in relation to the EUROSUR (European Border Surveillance) framework (<https://home->

affairs.ec.europa.eu/policies/schengen-borders-and-visa/border-crossing/eurosur_en) was mentioned, envisaging the information exchange and cooperation between Member States and Frontex to improve situational awareness and increase reaction capability at the external borders and the fusion of data from various sources including space. EO data are already used, moreover the possibility to have an authenticated position and other data coming from the different sources (including space) transmitted through a secure communication, especially when processing techniques such as Artificial Intelligence are involved, has a huge potential in borders' security operations.

A comment of the audience was made on the suitability of the title of the market segment, since the term "Resilient Societies" typically could refer to other subsegments, and "smart cities" was mentioned as example. It was suggested to use a more concrete name for the market segment which is reflecting the topics in a more concrete way. The proposal of "Safety and Security" was made by the audience. EUSPA explained that one of the driving criteria to choose this particular session name was to avoid possible overlaps with other already existing EUSPA UCP sessions. At the same time, the actual market segment covered by the session of "Resilient Societies" is called "Security and Surveillance". EUSPA explains that safety is covered by other market segments and therefore it is proposed to change the name of the session according to the market segment name.

It was reminded that this market was considered in UCP 2023 for the first time, and revisions are expected to be applied also to the naming of the segment/subsegments/applications if necessary, based on the feedbacks received. Regarding particular topics and applications, the approach was not to start with a wide number of them due to time constraints, and understanding that this is a first approach identifying three considered relevant subsegments. In future sessions, the considered applications will be enhanced.

On another subject, the audience confirmed that it is correct to treat Customs operations and logistics more in general as a dedicated market subsegment, and not split into the different transport domains (road, rail, maritime, aviation).

The next planned steps consist of:

- Producing an updated version of the RUR considering the outcomes of the UCP's session and including a part on Satcom as above mentioned;
- Making it publicly available for further inputs/comments;
- Producing a finalised version of RUR based on the collected inputs/comments, to be used for the possible future UCP.

2 CONCLUSIONS

Despite the heterogeneity of the subsegments and related applications, the involved stakeholders are quite familiar with GNSS and EO, and have different user requirements depending on the specific use case, even within the same subsegment and corresponding application.

GNSS is generally used for time tagging certain events and for identifying/locating targets/mobile assets, EO is generally used for monitoring changes. In general, both GNSS and EO are utilised in combination with other sensors/technologies/techniques.

Galileo Authentication could be of interest for applications implying the compliance to a regulation (e.g., transport of dangerous goods, fast corridors) and trade of special goods (e.g., radioactive material, special waste, sensitive and dual-use goods such as weapons).

For EO, the basic requirements are in the useability and accessibility of the available data especially for LEAs'.

Some commonalities can be outlined:

- The requirements for GNSS or EO are linked to the expectation for satellite technologies' ability

to improve present operations, or to enable new operations currently not possible, or to stimulate ideas for future implementations.

- This applies also to Satcom, for which a dedicated awareness is needed in order to create knowledge and generate ideas for use cases/users' needs.
- Awareness is also needed to enlarge the stakeholders' base, to ensure a deeper understanding of the capabilities of EU Space components/services and technologies (such as available solutions, how to use them, added values), and this is valid for GNSS, EO and Satcom, combined with more practice/implementations in order to collect other use cases and/or refine needs and requirements, including feedbacks on the naming of the market segment/subsegments and applications.

In conclusions, though the UCP 2023 analysis was devoted to this limited number of applications discussed, this segment seems very promising and there is a significant potential for further use of EU Space components and services, further subsegments (not overlapping with other market segments) and applications.

3 OTHER NOTES & INFORMATION

None

4 ANNEXES & ATTACHMENTS

Annex 1: List of Attendees

Attachments: PRESENTATIONS

ANNEX 1: LIST OF ATTENDEES

#	Name	Organization
1	Annalaura Di Federico	e-geos
2	Antonella Di Fazio	FDC
3	Axel Kerep	PARCS
4	Belen Andres	Kepler Communications
5	Berta Lucas	ESA
6	Camilla La Gioia	UXORISK
7	Ettore Motti	UXORISK
8	Ewelina Kootz	POLSA
9	Fabio Romano	SES
10	Frank Riquet	Eurocontrol
11	Giacomo Nizzi	Eagleprojects
12	Giovacchi Rosati	Eagleprojects
13	Jean-Philippe Mechin	CEREMA
14	Jorge Cabrera	EUSPACE/S.O.
15	Konstantinos Karysjinakis	CERTH
16	Luciano Cabrera	
17	Marco Mattiocco	Agenzia delle dogane e dei Monopoli